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NEW SPECIES OF POLYCHAETOUS ANNELIDS FROM THE VICINITY OF GALVESTON, TEXAS

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The following two new species of polychaetous annelids appeared in a collection from the vicinity of Galveston, Texas, sent me for identification by Professor Willis G. Hewatt of the Texas Christian University, Fort Worth, Texas.

Ariciidae

SCOLOPLOS BLAINVILLE

Scoloplos rufa, new species

Figures 1 to 6

The type is incomplete posteriorly but retains about 200 somites and is 96 mm. long. Its greatest diameter is 1 mm. The color (in preserved material) is dark reddish brown. The prostomium (Fig. 1) is conical and is about as long as the first somite. No eyes are visible. The protruded pharynx (Fig. 2) is much convoluted and is supported on a narrow stalk. The second somite is about three-quarters as long as the first and later ones are about equal to these in length. Anteriorly the body is round in cross section but from the region of about the 25th somite and with the development of the gills it becomes more and more flattened on the dorsal surface and the somites are shorter and much crowded. In anterior somites the setae arise direct from the body wall with no indication of parapodia but there is a distinction between a notopodial and a neuropodial tuft. Posterior to the 12th setigerous somite (I was unable to find it anterior to this point) a rounded cirrus-like lobe, shorter than the setae, arises posterior to the notosetal tuft (Fig. 3 of the 15th setigerous somite). By the 20th setigerous somite this has developed into a prominent notopodial lobe (Fig. 4). Another but much smaller lobe appears on the dorsal neuropodial surface. From the 13th to the 25th setigerous somites there is a gradual shifting of the parapodia from a lateral to a dorsal position and posterior to the 25th the notopodial lobe is definitely dorsal and the neuropodial dorsolateral in position. The gills begin as small cirrus-like structures on either side of the median dorsal line in setigerous somite 26 and in later somites increase in size as do the notal cirri so that gills and cirri form a prominent transverse row on the dorsal surface of each somite (Fig. 5) which represents one-half of the cross section of a somite showing dorsal and ventral parapodial lobes with setae and gills. In some somites there are two gills, one on either side. In the one drawn there were four, the two median ones united at their bases. Because of the crowded condition of the somites and the fact that the gills are so easily dislodged, whether there is any definite distribution of the two- and four-grouped gills, I am unable to state. One specimen has a smooth cylindrical pygidial region devoid of appendages. Assuming that this is normal and not a regenerating condition it is markedly different from the condition described by McIntosh (1908) for *S. armiger* in British Annelids (Ray Society Publication), II, p. 512.

The setae are all essentially alike, differing only in their relative lengths. They have slender axes, terminating in sharp points and at a short distance outside the body wall they become bilimbate. Beginning at this point the shaft is crossed by series of parallel lines of which a detail taken from about the middle of the seta is shown in Fig. 6. In profile these lines can be seen to be the expression of minute plates which slightly protrude distally so that they give the profile a minutely toothed structure.

The type is Cat. No. 2895, in The American Museum of Natural History.

Collected at Offats Bayou, Galveston.

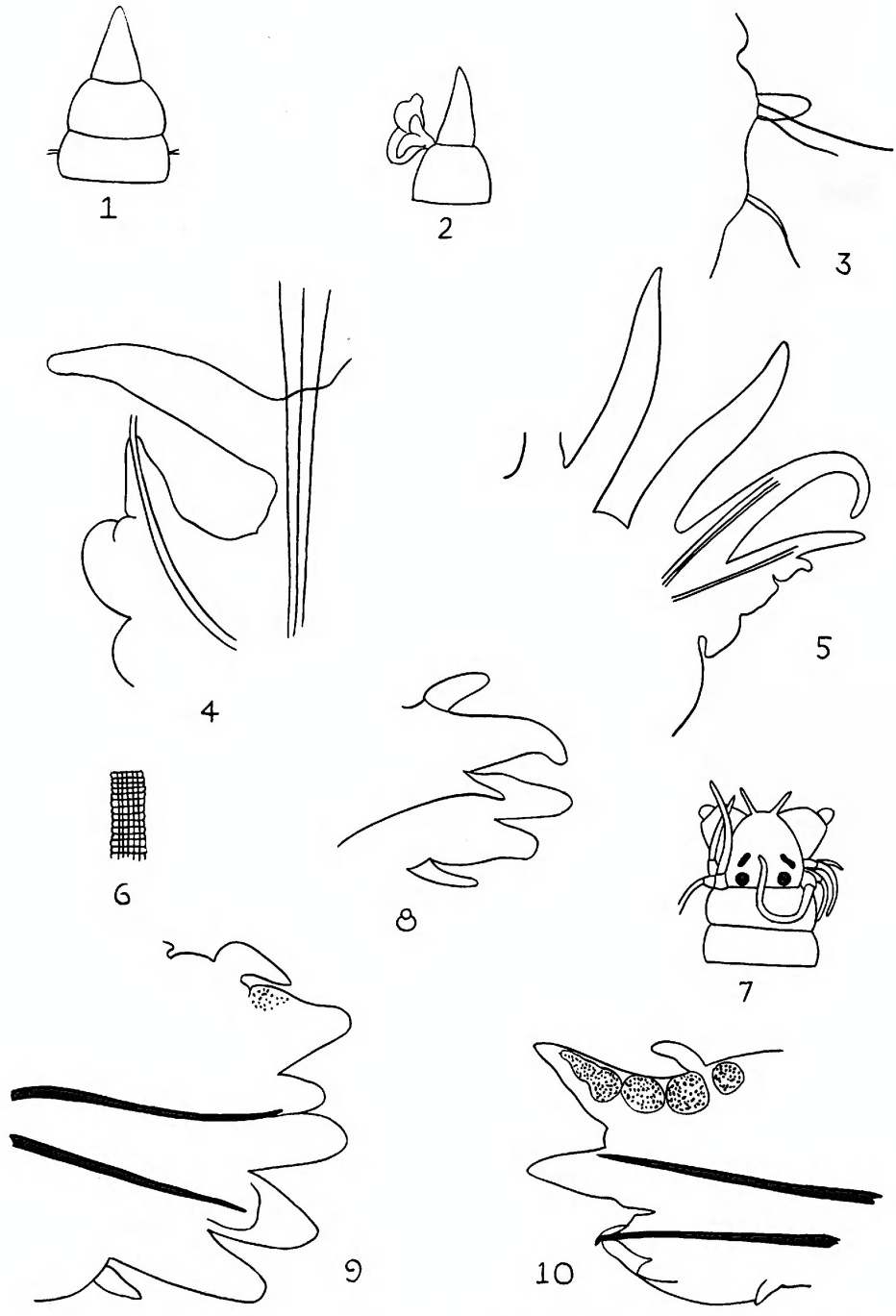
Nereidae

LEPTONEREIS KINBERG

Leptonereis nota, new species

Figures 7 to 10

A single specimen lacking the posterior end. What remains is 55 mm. long and has a posterior width of 1 mm. The body is widest at about somite 6 and from here it tapers slightly toward the head and more noticeably posteriorly. The preserved specimen has a dark brown color due to pigmentation which is especially noticeable in the parapodial lobes. In addition there is in all but the first two or three parapodia a dark pigment patch on the dorsal surface of the notopodium near its base and a lighter one on the ventral surface of the body near the neuropodial base. At about somite 50 the dorsal notopodial patch begins to extend on to the



Figs. 1 to 6. *Scoloplos rufa:* 1, anterior end, × 14; 2, lateral view of anterior end showing protruded pharynx, × 14; 3, fifteenth parapodium, × 48; 4, twentieth parapodium, × 48; 5, section of right half of a posterior somite, × 32; 6, detail of seta structure, × 350.

Figs. 7 to 10. *Leptonereis nota:* 7, anterior end, × 5.6; 8, first parapodium, × 45; 9, seventh parapodium, × 31.5; 10, eightieth parapodium, × 31.5.

dorsal median surface of each somite and in posterior somites is a narrow, nearly continuous band across the somite.

The pharynx is protruded, which may have led to distortion in the head region but in its present condition the prostomium (Fig. 7) is somewhat broader than long and its lateral margins merge into the basal joints of the palps so that the lines between are indistinct. The tentacles are slender and extend about to the apices of the basal palpal joints and are widely separated at their bases. The terminal palpal lobe is rounded and small. The tentacular cirri are all small, the posterior dorsal one being the longest and in the present condition of the specimen it extends to the fourth somite. The posterior eyes are situated near the posterior prostomial border and are round in outline, the anterior ones smaller and linear in outline. The latter are placed so that their longer diameter lies at an angle to that of the body. There are no paragnaths. The first somite is somewhat shorter than the prostomium, following ones are about the same as the first.

In the genus *Leptonereis* the first two parapodia are uniramous. In *L. nota* (Fig. 8), the first parapodium has only the neuropodium, the notopodium being represented by a single lip without setae or aciculae. This notopodial lip is heavy, rounded at the apex and has pigment patches on dorsal and ventral surfaces near its base. The neuropodium has two relatively heavy, rounded lobes with posterior to them a small setal lobe into which the acicula extends. The dorsal and ventral cirri are relatively small, the dorsal one being the larger, and are devoid of pigment. The seventh parapodium (Fig. 9) has a notopodium of two heavy, blunt lobes and a smaller setal lobe between them, the neuropodium similar to that of the first but larger and heavier. The dorsal and ventral cirri are smaller than in the first but not noticeably different in shape. In the posterior body region is a very noticeable change in parapodial structure. Here (Fig. 10) the notopodium is composed of two well-separated conical lobes with a heavy acicula coming to the surface between them. The dorsal cirrus is small and situated well toward the base of the parapodium. A row of heavy pigmentation extends along the dorsal surface. I could find no definite setal lobe. The neuropodium is much smaller than in anterior somite and is made up of a bluntly rounded lobe posterior to which are two smaller ones, one of which is acutely pointed, the other short and broad with acute apex. The ventral cirrus is very small and easily overlooked. It is situated at the base of the parapodium.

Setae are poorly developed, there being comparatively few in anterior somites and fewer in posterior ones. In anterior parapodia were a number of stout basal joints all homogomphous and lacking the terminal joints. Among these were two or three much smaller ones also homogomphous and with slender pointed terminal joints faintly toothed along one margin. In posterior parapodia I found only one seta in the notopodium and not more than eight in the neuropodium. All lacked the terminal joints but the two kinds of basal joints found in anterior somites appear here. I am uncertain whether there are really two kinds or whether these represent older and younger stages of one kind.

The type is Cat. No. 2896, in The American Museum of Natural History.

Collected at Offats Bayou, Galveston, Texas.